

wild-type	5'-CCGGGGTGGTTGGCGAAGGCAGTCCCCTGTGCTGCC-3' (SEQ ID NO: 11)
sample	5'-CCGG ^A AGTGGTTGGCGAAGGCAGTCCCCTGTGCTGCC-3' (SEQ ID NO: 12)
primer	3'-CACCAACCGCTTCCGTCAGTGGA-5' (SEQ ID NO: 13)
labeled ddNTP	
dd(A ^{*1})TP	3'-CACCAACCGCTTCCGTCAGTGGA-5' (SEQ ID NO: 13)
dd(T ^{*2})TP	3'- ^{*2} TCACCAACCGCTTCCGTCAGTGGA-5' (SEQ ID NO: 14)
dd(C ^{*3})TP	3'-CACCAACCGCTTCCGTCAGTGGA-5' (SEQ ID NO: 13)
dd(G ^{*4})TP	3'-CACCAACCGCTTCCGTCAGTGGA-5' (SEQ ID NO: 13)

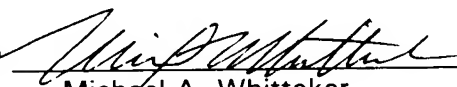
REMARKS

Applicant believes that the present application is now in condition for allowance.
Favorable consideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date March 11, 2002
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Appendix A: Marked up version of amended paragraph, showing changes made

[0024] In the following diagram of a primer extension reaction, four different ddNTPs, each distinctively labeled, are present in the reaction mixture as designated by dd(A*1)TP, dd(T*2)TP, dd(C*3)TP and dd(G*4)TP, where *1, *2, *3 and *4 represent different labels. In the diagram, the polymorphism in the nucleic acid being tested is indicated by an underlined nucleotide, and the extension primer sequence is italicized. Only one ddNTP, ddTTP, can be added to the 3' end of the extension primer, because thymine (T) is the only base that pairs with adenosine (A). The addition of the dd(T*2)TP to the 3' of the primer prevents any further primer extension because it is a dideoxy, chain-terminating ddNTP. Thus, the only primer that is 3' extended is labeled with label *2. Detection of the signal from label *2 indicates that the A polymorphism is present in the sample:

wild-type	5'-CCGGGGTGGTTGGCGAAGGCAGTCCCCTGTGCTGCC-3' (SEQ ID NO: 11)
sample	5'-CCGG <u>A</u> GTGGTTGGCGAAGGCAGTCCCCTGTGCTGCC-3' (SEQ ID NO: 12)
primer	3'-CACCAACCGCTTCCGTCAGTGGA-5' (SEQ ID NO: 13)
labeled ddNTP	
dd(A*1)TP	3'-CACCAACCGCTTCCGTCAGTGGA-5' (SEQ ID NO: 13)
dd(T*2)TP	3'- [*] 2TCACCAACCGCTTCCGTCAGTGGA-5' (SEQ ID NO: 14)
dd(C*3)TP	3'-CACCAACCGCTTCCGTCAGTGGA-5' (SEQ ID NO: 13)
dd(G*4)TP	3'-CACCAACCGCTTCCGTCAGTGGA-5' (SEQ ID NO: 13)